

Remarks

This amendment has been made in response to the Office Action of November 17, 2004. Applicant has reviewed the Office Action in detail and appreciates the Examiner's attention to this application.

Applicant's attorney expresses appreciation to the Examiner for his kindness in allowing the brief telephone interview of March 15, 2005. During such telephone interview, the principal references, *i.e.*, Japanese Pub. No. 06-182770 ("the '770 reference") and Japanese Pub. No. 08-256046 ("the '046 reference"), were discussed and claim language distinguishing over such references was proposed and discussed. The amendments now made to independent claims 1 and 15 are in keeping with the proposed claim language discussed during the interview. The patentability of the amended claims will be discussed below in dealing with the rejections in the outstanding Office Action.

Applicant notes with appreciation the indication (in paragraphs 15 and 16 of the Office Action) of the allowability of claims 8-10, 12-14 and 23-25 as filed, provided such claims are rewritten in independent form and/or to overcome certain rejections under 35 USC 112, second paragraph (see below). Claims 12 and 23 have been rewritten in independent form while avoiding any section 112 problems. The dependency of claims 14 and 25 has been adjusted to make such claims dependent on rewritten claims 12 and 23, respectively, thus putting claims 14 and 25, along with dependent claims 13 and 24, in condition for allowance. Rather than rewriting claims 8 and 10 in independent form, such claims remain dependent (indirectly) on claim 1, which is now amended to overcome the rejections based on prior art.

With these changes, there are now four independent claims in the application: claims 1, 13, 15 and 23.

Original claims 1-28 were pending in this application before the Office Action. Each of the items of the Office Action not already dealt with above will now be dealt with in appropriate order.

By telephone the Examiner had earlier imposed a restriction requirement. In the Office Action, the restriction requirement between the inventions of claims 1-25 and the inventions of claims 26-28 is repeated. In response to the telephone restriction, a provisional election of the

inventions of claims 1-25 was made with traverse by the undersigned attorney. Applicant now affirms the election of claims 1-25, but will not argue against the restriction requirement. Thus, claims 26-28 are now cancelled without prejudice.

In paragraph 5 of the Office Action, the Examiner made a suggestion concerning clarity and consistency of certain claim language, referring in particular to claim 22. Such suggestion has been adopted in amended claim 22 – and also in claim 11, where the same language existed.

In rechecking claim language, the undersigned noticed a minor error in each of claims 7 and 22, *i.e.*, the inclusion of two extraneous words which are plainly out of place. In each of these claims, the words “first end” occurring immediately after “to form the second end of the base member” have been stricken.

Claims 10, 14 and 25 were rejected under 35 USC 112, second paragraph, for insufficient antecedent by virtue of usage of the term “blade” instead of the term “fin.” Each of these claims has been amended to use the term for which the antecedent exists, thus overcoming this rejection.

Claims 1-6 and 15-20 were rejected under 35 USC 102(b) as anticipated by the Japanese ‘770 reference. As indicated during the telephone interview of March 15, 2005, claims 1 and 15 have now been amended to clarify the relationship between the coolant-encountering fin and the base member. The amendments now made in claims 1 and 15, and thus in each of the dependent claims, patentably distinguishes over the cited prior art.

Amended claims 1 and 15 now require that the base member be “mechanically immovably affixed” to the fin. This is in stark contrast to what is disclosed in the ‘770 reference, the very essence of which involves a movable non-affixed relationship between fin and base. This is seen in the drawings of the ‘770 reference, and in several places in the English translation. For example, about six lines up from the bottom of the English-language abstract, the ‘770 reference states as follows: “[T]he baffle plate 14 shifts relatively by the amount of the aforesaid eccentricity between it and the hole 19 of the embedding plug 18, while it is rotated with the embedding plug 18.” The machine translation in at least two locations uses the words “sliding of the cross direction of a baffle plate” to describe the relationship of plug and baffle.

Applicant’s specification as filed thoroughly discloses the immovable fixed relationship of fin and base member. A number of examples will now be given. At page 5, beginning at line 5, the specification states that the portion of the fin engaging the base member is “dimensioned to

snugly engage the base-member-engaging portion of the fin,” and then goes on to define “snugly” as referring to “pressure fits and tolerance fits”; these sorts or fits are known to create and immovable relationship. At page 6, lines 5-6, the specification states that the “fin is in tight mechanical engagement with the base portion.” At page 12, beginning at line 10, there is again reference to a “low-tolerance pressure fit,” and an indication that “pressure must be applied to trailing edge 74 to urge blade 32 transversely into channel 52 and interlocking engagement with plug base 47.” It is more than apparent that the relationship of base member to fin is accurately described as “mechanically immovably affixed.”

Applicant’s specification lays out in some detail the significant problems with plug baffle devices of the prior art. Applicant’s invention overcomes such problems and provides important advantages. Amended claims 1 and 15 and their dependent claims are patentably distinguishable over the ‘770 reference and the other prior art.

Claims 1-5, 15, 16 and 20 were rejected under 35 USC 102(b) as anticipated by the Japanese ‘046 reference. As indicated during the telephone interview of March 15, 2005, the amendments of independent claims 1 and 15 patentably distinguish applicant’s invention over the ‘046 reference.

The “mechanically immovably affixed” relationship required by amended claims 1 and 15 is also in stark contrast to what is disclosed in the ‘046 reference. Once again, the very essence of the fin-to-base-member relationship of the ‘046 reference is movable and not affixed. The structure of the ‘046 reference has three parts -- a threaded plug 2 and a “buffle plate” 1 (to use the language of the English abstract), in addition to a fin. As recognized by the Examiner during the telephone interview, the relationship of the threaded plug to the “buffle plate” is far from an affixed relationship; instead, it merely involves ridge-in-groove rotational alignment. More important, the relationship of the fin to the “buffle device” is intentionally an adjustable one, showing that the fin is plainly not immovably affixed to anything – and certainly not to the threaded plug.

For all the reasons given above in connection with the ‘770 reference, applicant’s amended claims 1 and 15 are patentably distinguishable over the ‘046 reference.

Claims 7, 11 and 22 were rejected under 35 USC 103(a) as unpatentable over the ‘046 reference in view of applicant’s admitted prior art. This rejection is respectfully traversed in view

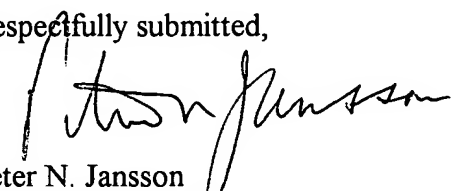
of the foregoing amendments of claims 1 and 15, on which claims 7, 11 and 22 directly or indirectly depend. Each of applicant's dependent claims defines a patentable invention having significant value in the art related to plug baffle devices for directing coolant flow in molding equipment.

Claims 21 is rejected under 35 USC 103(a) as unpatentable over the '770 reference in view of Lin. This rejection is respectfully traversed in view of the foregoing amendment of claims 15, on which claim 21 depends. The invention of claim 21 is patentably distinguishable over the prior art.

Based on the claim changes now made, this application has three fewer claims than as originally filed and has a total of four independent claims, as opposed to the three independent claims originally filed; accordingly, an additional filing fee of \$100 is required. Such filing fee and the small-entity one-month extension fee of \$60 may together be charged to Deposit Account No. 10-0270.

Applicant believes that all claims are in proper form for allowance. Early favorable action is earnestly solicited. The Examiner is invited to call the undersigned attorney if that would be helpful in facilitating resolution of any issue which might remain. If any fees are due, please debit Deposit Account 10-0270 and inform the undersigned.

Respectfully submitted,


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Chris Wipper
Name


Signature

3/15/05
Date